10/591172

AMENDMENT under Art.34 of PCT

What is claimed is:

IAP5 Rec'd PCT/PTO 30 AUG 2006

- 1. (Cancelled)
- 2. A phosphoramidite method for the synthesis of a nucleic acid oligomer with the use of a mixture of an alcohol-type compound and an acid catalyst as an activator.
- 3. A method according to Claim 1 or 2, wherein the alcohol-type compound is selected from the group consisting of hydroxybenzotriazole-1-ol (HOBt), a HOBt-derivative and a phenol analogue.
- 4. A method according to Claim 1 or 2, wherein the HOBt-derivative has substituents at its 4 and/or 6 positions.
- 5. A method according to Claim 4, wherein the HOBt-derivative is 6-trifluoromethylbenzotriazole-1-ol, 6-nitrobenzotriazole-1-ol, or 4-nitro-6-trifluoromethyl benzotriazole-1-ol.
- 6. A method according to Claim 3, wherein the phenol analogue is selected from the group consisting of 2,4-dinitrophenol, 3,4-dicyanophenol and 2-nitro-4-trifluoromethylphenol.
- 7. A method according to any one of Claims 2 6, wherein the acid catalyst is selected from the group consisting of imidazole, tetrazole and their derivatives.
- 8. A method according to Claim 7, wherein the acid catalyst is benzimidazoletriflate (BIT), 4-ethylthiotetrazole, imidazolium triflate or 4,5-dicyanoimidazole.
- 9. A method according to any one of Claims 1-8, wherein a mixture comprising an equal amount of the alcohol-type compound and the acid catalyst is used as the activator.
- 10. A method according to any one of Claims 1-9 with the use of a solid phase support.
- 11. (Cancelled)
- 12. (Cancelled)
- 13. (Cancelled)
- 14. (Newly added) A method according to any one of Claims 1-10, wherein the mixture of 6-trifluoromethylbenzotriazole-1-ol and benzimidazoletriflate is used as the activator.